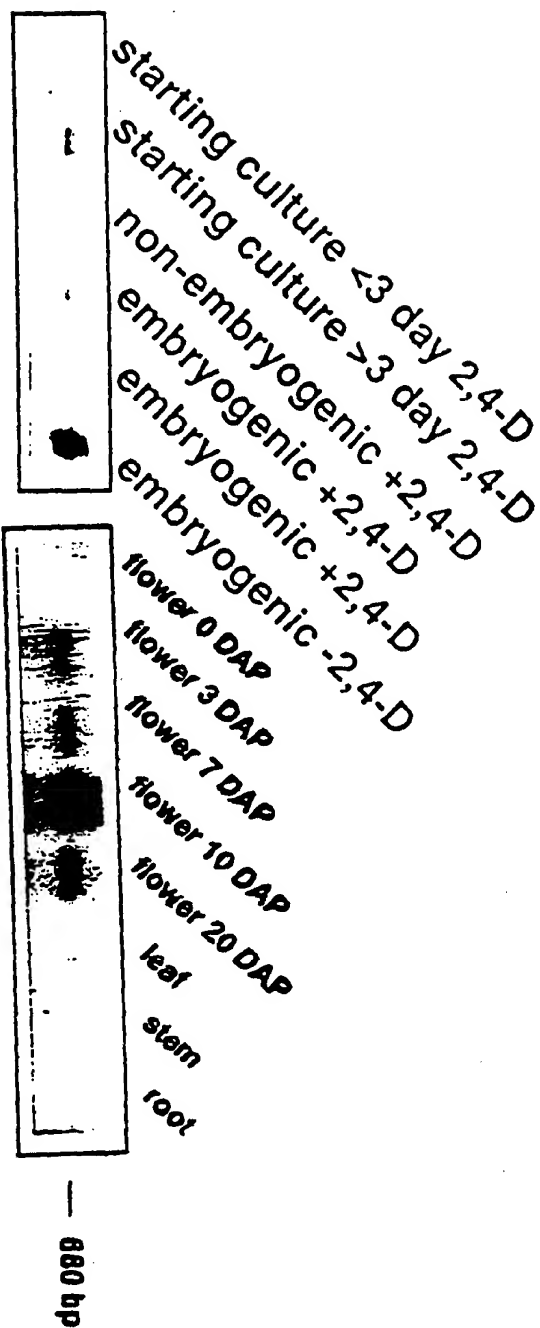
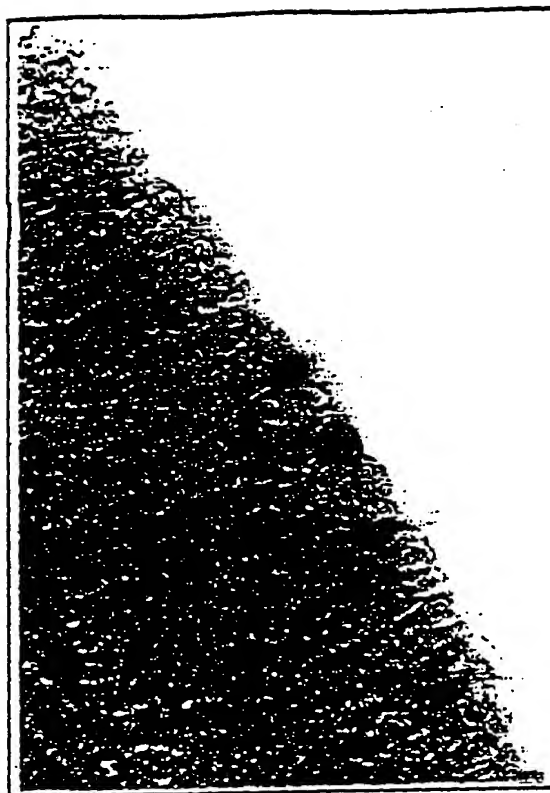


Figure 1



09/180798-11698

Figure 2



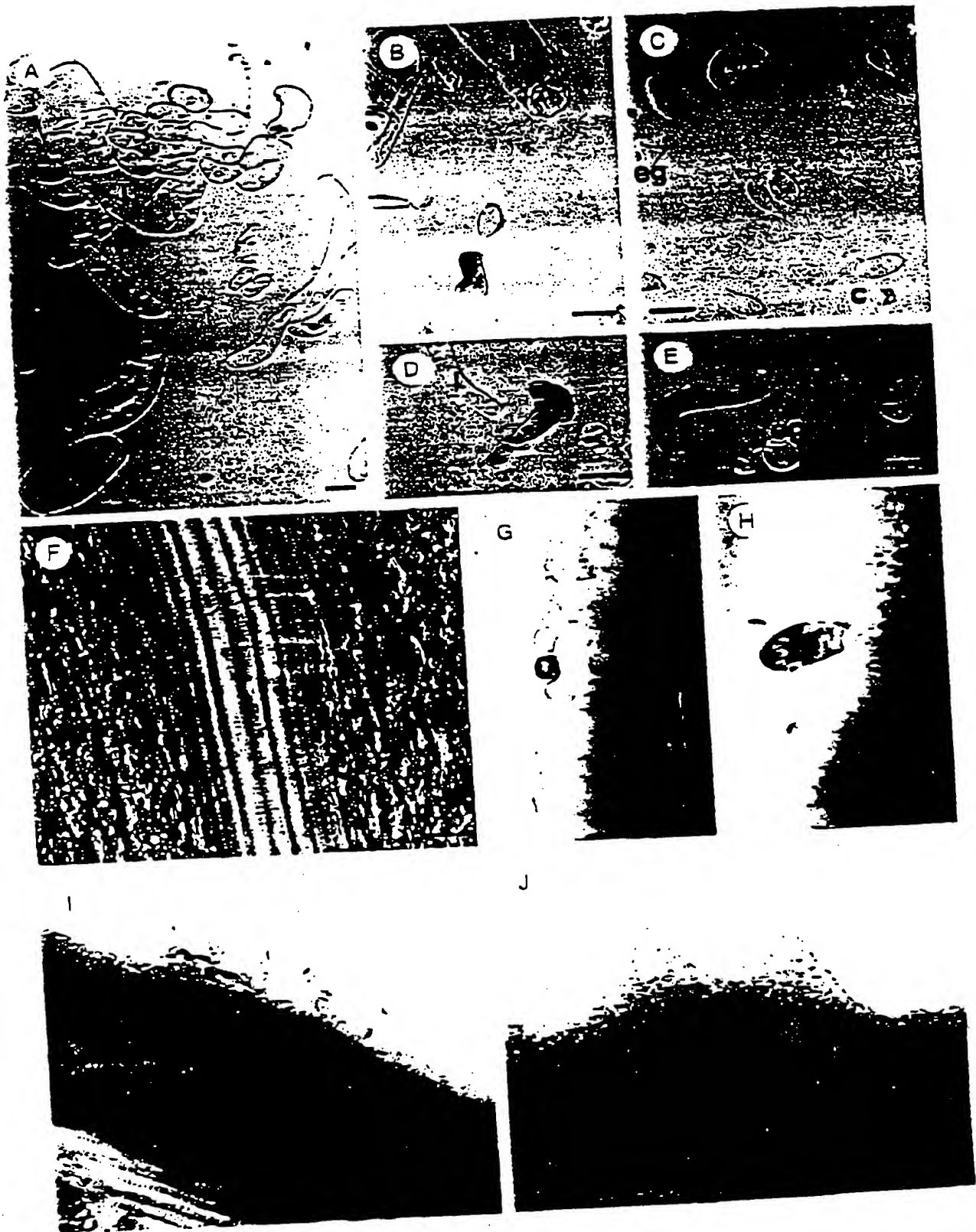
A



B

09/180798-1160

Figure 3



09180798-11508

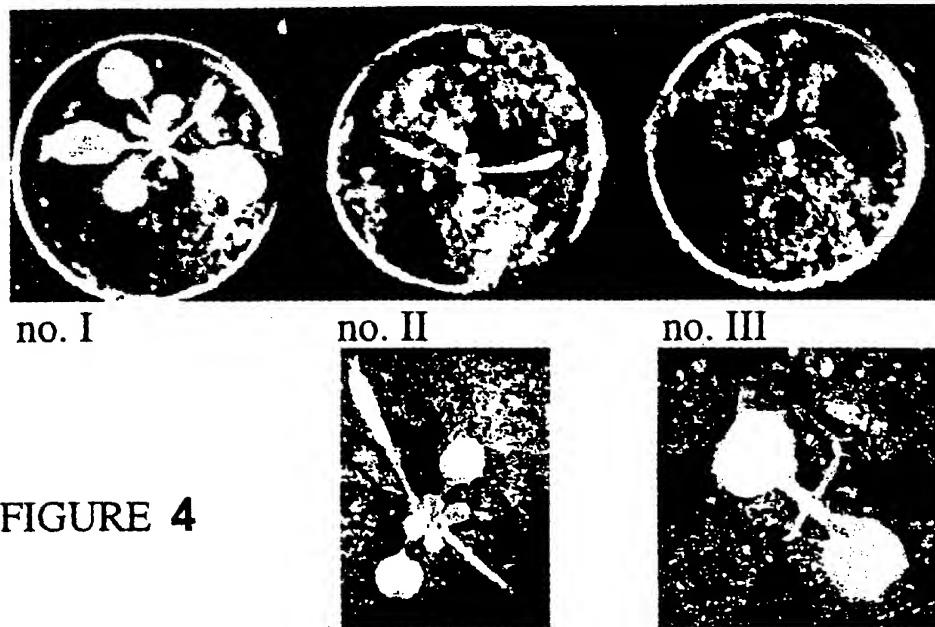


FIGURE 4

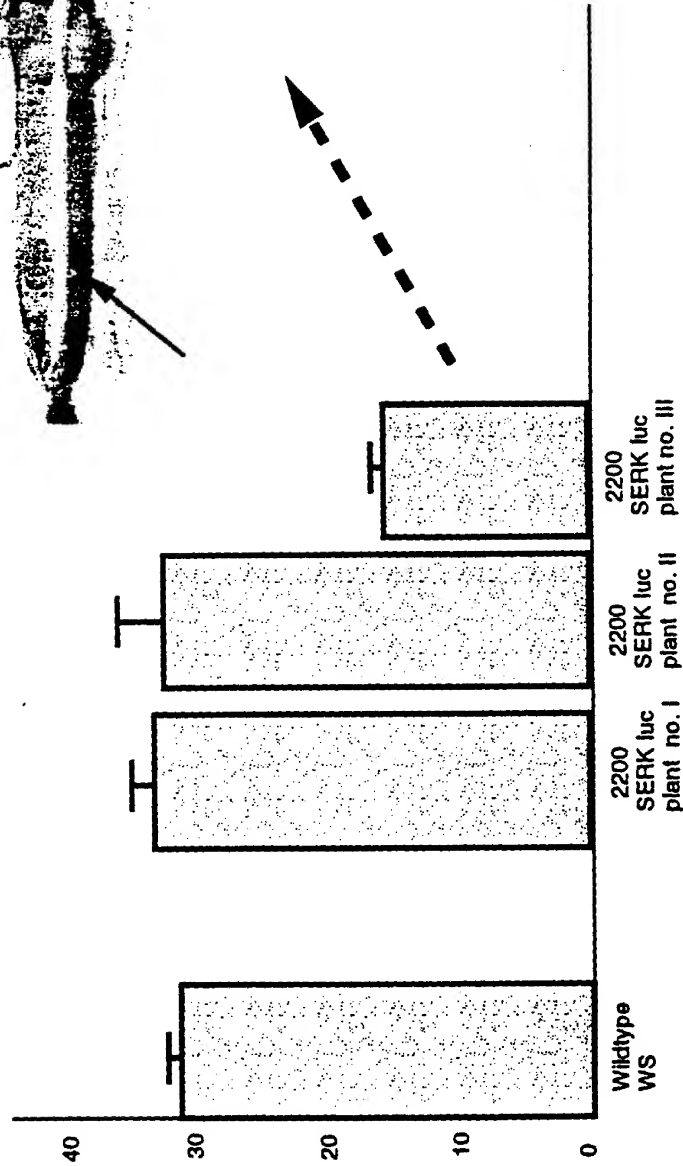
Arabidopsis WS plants transformed with the 2200 bp SERK-luciferase construct show a phenotype at the seedling level. Pictures were taken at 28 days after germination of T2 seeds. In plant II and III no clear shoot meristem is visible at the seedlings stage, 7 days after germination. The first two leaves, if they develop at all, are needleshaped as shown on the pictures taken at 28 days after germination. At this time plant I, which shows no clear phenotype, already starts flowering. Secondary shoot meristems are already developing in plant no. II and will also develop later from no. III. Shoot meristems, inflorescences and normal flowers eventually develop on all plants.

BIOSTATISTICS

Figure 5

The 2200 SERK luc construct affects the number of developing ovules in the siliques of transformed plants

developing green ovules average of four siliques from three T2 plants each



In the siliques from the offspring of plant no. III many of the ovules do not develop into normal seeds and remain small (as shown by the arrows)

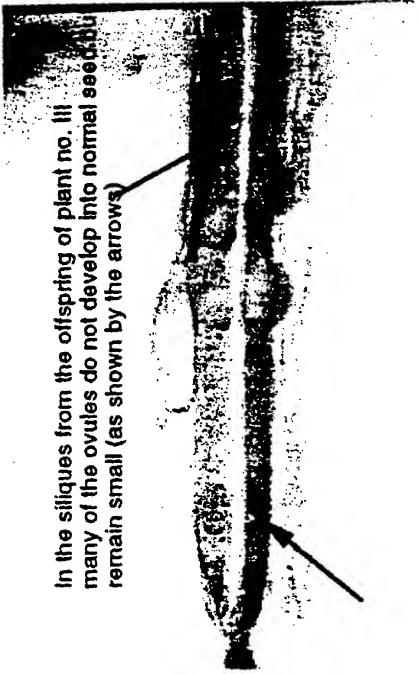


Figure 6

Purified SERK fusion protein is used for autophosphorylation in vitro. Most, if not all of the phosphorylation of SERK takes place on threonine residues.

lane 1, the purified SERK fusion protein;
 lane 2, serine phosphate; lane 3, threonine phosphate; lane 4, tyrosine phosphate.

